REMARKS/ARGUMENTS

1.)   Claim Amendments

Claims 19 and 31 have been cancelled. Accordingly, Claims 17-18, 20-30, and 32-42 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.)   Double Patenting

Claims 17, 29, and 41 were provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 30 of co-pending U.S. Patent Application No. 12/064,073 in view of APA further in view of Sweeney (US 6,401,182) and Miyawaki (US 2005/0157619). Applicant does not wish to file a terminal disclaimer at this time, but will file such a terminal disclaimer if necessary in the future.

3.)   Examiner Objections - Claims

Examiner objected to claims 20 and 32 because of informalities. Applicant has amended the claims to address Examiner's concerns. Thus, Applicant respectfully requests that the object be withdrawn.

4.)   Claim Rejections – 35 U.S.C. § 103 (a)

Examiner rejected claims 17, 23, 26-29, 35, 38-42 under 35 U.S.C. § 103(a) as being unpatentable over Liu, *et al.* (US 2004/0068719) in view of APA or Lohse, *et al.* (US 2003/0142556). While not conceding that the cited references qualify as prior art, but instead to expedite prosecution, Applicant has chosen to respectfully disagree and traverses the rejection as follows. Applicant reserves the right, for example, in a continuing application, to establish that the cited references, or other references cited now or hereafter, do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

Applicant respectfully submits that claims 17, 23, 26-29, 35, and 38-42 are patentable because Liu, APA or Lohse, taken alone or in any permissible combination, fail to disclose, teach, or even suggest the elements of independent claims 17, 29, or

41, as discussed herein. For example, independent claim 17 recites "performing at least one optimization step adapted to decrease the number of memory sectors of the second set of memory sectors occupied by the updated code version that are different from the corresponding memory sectors of the first set of memory sectors occupied by the current program code version." Independent claims 29 and 41 recite substantially similar elements. In support of the rejection, Examiner cites paragraphs [0053] and [0054] of Liu as allegedly disclosing the aforementioned element of the independent claims. Paragraphs [0053]-[0054] of Liu discuss:

> *Next, in block 436, the compiler 106 estimates how much data may be designated as short data in view of the short data and linkage table size estimates made by the linker 108. In particular, the compiler 106 determines the amount of the short data area 114 that has already been consumed and then calculates, using the compiler short data estimator 122, an estimated threshold for all other short data so as to utilize as much short data area as possible. As noted above, this threshold is calculated with reference to the data allocation rules 144 so that the information provided by the linker 108 is properly evaluated. These rules may include rules as to when the linker 108 allocates linkage tables, how the linker lays out common data, what algorithm the linker uses to determine the size of the linkage tables, etc. Through this process, more data will be designated as short data than in previous solutions due to the feedback provided by the linker 108 after it conducts its whole program analysis.*

> *With reference then to block 438, the compiler 106 generates all real objects and allocates data as short data or long data. Once all the real objects have been generated, they are then be linked together by the linker 108, as indicated in block 440, to produce an executable, short data optimized program. In that a greater amount of the short data area 114 is utilized due to the performed optimization, the resultant program can be executed with greater speed.*

At most, the cited passage discusses Liu's system of designating more data as short data in order to generate a short data optimized program. However, generating a short data optimized program involves generating a program where a greater amount of data is designated as "short data" to enable direct access by a processor, which in turn, results in increased program execution speed. *See e.g.*, paragraph [0002] of Liu. However, recharacterizing data as short data to generate a short data optimized program is markedly different from what is recited in the independent claims ("performing at least one optimization step adapted to <u>decrease the number of memory</u> <u>sectors of the second set of memory sectors</u> occupied by the updated code version <u>that</u> <u>are different from the corresponding memory sectors of the first set of memory sectors</u> occupied by the current program code version") (*emphasis added*). In other words, the claimed optimization reduces the number of memory sectors that are different between

the first set of memory sectors and the second set of memory sectors. The reduction of differences between two sets of memory sectors is clearly different from the recharacterization of data from long data to short data described in Liu. The reduction of differences between the two sets of memory sectors reduces the number of re-writes required during a software update (*See* published specification, paragraph [0013]) whereas the recharacterization of data from long data to short data as described in Liu increases execution speed of the program during execution, not during an update. Thus, for at least this reason, independent claims 17, 29, and 41 (as well as all claims dependent therefrom) are patentable. Applicant respectfully requests that the rejection be withdrawn.

Examiner rejected claims 18, 30 under 35 U.S.C. § 103(a) as being unpatentable over Liu in view of APA or Lohse, further in view of Ren, *et al.* (US 2004/0260734). Ren is not cited as disclosing, teaching, or even suggest any of the elements of independent claims 17 or 29. Thus, claims 18 and 30 are patentable over Liu, APA or Lohse, and Ren, taken alone or in any permissible combination, at least due to their dependency on independent claims 17 or 29. Applicant therefore respectfully requests that the rejection be withdrawn.

Examiner rejected claims 19-20, 31-33 under 35 U.S.C. § 103(a) as being unpatentable over Liu in view of APA or Lohse and Ren, further in view of Szewerenko, *et al.* (US 2001/0047512) and/or O'Boyle, et al. ("Feedback Assisted Iterative Compilation", May 2000, pp.1-9). Szewerenko and/or O'Boyle are not cited as disclosing, teaching or even suggesting any of the elements of independent claims 17 or 29. Thus, claims 19-20 and 31-33 are patentable over Liu, APA or Lohse, Ren, and Szewerenko and/or O'Boyle, taken alone or in any permissible combination, at least due to their dependency on independent claims 17 or 29. Applicant therefore respectfully requests that the rejection be withdrawn.

Examiner rejected claims 21-22, 33-34 under 35 U.S.C. § 103(a) as being unpatentable over Liu in view of APA or Lohse and Ren, further in view of Szewerenko, and/or O'Boyle and Sweeney (US 6,401,182). Szewerenko and/or O'Boyle and Sweeney are not cited as disclosing, teaching or even suggesting any of the elements of independent claims 17 or 29. Thus, claims 21-22 and 33-34 are patentable over Liu,

APA or Lohse, Ren, and Szewerenko and/or O'Boyle, and Sweeney, taken alone or in any permissible combination, at least due to their dependency on independent claims 17 or 29. Applicant therefore respectfully requests that the rejection be withdrawn.

Examiner rejected claims 24-25, 36-37 under 35 U.S.C. § 103(a) as being unpatentable over Liu in view of APA or Lohse, further in view of O'Boyle, and Peyton, Jr., *et al.* (US 5,920,723). O'Boyle and Peyton are not cited as disclosing, teaching, or even suggesting any of the elements of independent claims 17 or 29. Thus, claims 24-25 and 36-37 are patentable over Liu, APA or Lohse, O'Boyle, and Peyton, taken alone or in any permissible combination, at least due to their dependency on independent claims 17 or 29. Applicant therefore respectfully requests that the rejection be withdrawn.

CONCLUSION

In view of the foregoing remarks, Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. Applicant, therefore, respectfully requests that Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

Applicant requests a telephonic interview if Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

/ Ronald S. Liu /

Date: December 16, 2011

Ronald S. Liu
Reg. No. 64,170

6300 Legacy Drive
M/S EVR 1-C-11
Plano, TX 75024
972-583-8512
ronald.liu@ericsson.com